

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY
(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

RECD 03 JUN 2005

PCT

PCT

Applicant's or agent's file reference 55633PCT jw/mw	FOR FURTHER ACTION See Form PCT/IPEA/416	
International application No. PCT/SE2004/000219	International filing date (day/month/year) 18-02-2004	Priority date (day/month/year) 18-02-2003
International Patent Classification (IPC) or national classification and IPC G06F17/60, H04N7/173		
Applicant Namvar, Kianoush		

1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 4 sheets, including this cover sheet.

3. This report is also accompanied by ANNEXES, comprising:

a. ☒ (sent to the applicant and to the International Bureau) a total of 5 sheets, as follows:

☒ sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).

☐ sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.

b. ☐ (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s))

_____, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).

4. This report contains indications relating to the following items:

☒ Box No. I Basis of the report

☐ Box No. II Priority

☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

☐ Box No. IV Lack of unity of invention

☒ Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

☐ Box No. VI Certain documents cited

☐ Box No. VII Certain defects in the international application

☐ Box No. VIII Certain observations on the international application

Date of submission of the demand 15-09-2004	Date of completion of this report 16-05-2005
Name and mailing address of the IPEA/SE Patent- och registreringsverket Box 5055 S-102 42 STOCKHOLM Facsimile No. +46 8 667 72 88	Authorized officer Jesper Bergstrand /LR Telephone No. +46 8 782 25 00

Form PCT/IPEA/409 (cover sheet) (January 2004)

Best Available Copy

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/SE2004/000219

Box No. I Basis of the report

1. With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.

- ☐ This report is based on a translation from the original language into the following language _____, which is the language of a translation furnished for the purposes of:
- ☐ international search (under Rules 12.3 and 23.1(b))
 - ☐ publication of the international application (under Rule 12.4)
 - ☐ international preliminary examination (under Rules 55.2 and/or 55.3)

2. With regard to the elements of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:

- ☐ the international application as originally filed/furnished
- ☒ the description:
- pages 1 - 22 as originally filed/furnished
- pages* _____ received by this Authority on _____
- pages* _____ received by this Authority on _____
- ☒ the claims:
- pages _____ as originally filed/furnished
- pages* _____ as amended (together with any statement) under Article 19
- pages* 23 - 27 received by this Authority on 17-02-2005
- pages* _____ received by this Authority on _____
- ☒ the drawings:
- pages 1 - 7 as originally filed/furnished
- pages* _____ received by this Authority on _____
- pages* _____ received by this Authority on _____
- ☐ a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.

3. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages _____
- ☐ the claims, Nos. _____
- ☐ the drawings, sheets/figs _____
- ☐ the sequence listing (*specify*): _____
- ☐ any table(s) related to the sequence listing (*specify*): _____

4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

- ☐ the description, pages _____
- ☐ the claims, Nos. _____
- ☐ the drawings, sheets/figs _____
- ☐ the sequence listing (*specify*): _____
- ☐ any table(s) related to the sequence listing (*specify*): _____

* If item 4 applies, some or all of those sheets may be marked "superseded."

Past Available Copy

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/SE2004/000219

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	<u>1-22</u>	YES
	Claims		NO
Inventive step (IS)	Claims	<u>1-22</u>	YES
	Claims		NO
Industrial applicability (IA)	Claims	<u>1-22</u>	YES
	Claims		NO

2. Citations and explanations (Rule 70.7)

This report has been based on the amended claims filed with the letter of 2005-02-17.

Documents cited in the International Search Report:

D1: WO0160069 A

D2: EP1032148 A

D3: EP0967804 A

D4: US5424770 A

D5: EP0751640 A

The cited documents represent the general state of the art. The invention defined in claims 1-22 is not disclosed by any of these documents.

The cited prior art does not give any indication that would lead a person skilled in the art to the claimed system for transmitting signals to a plurality of subscriber receivers, wherein each signal represents a type of information belonging to a particular contents category, comprising: a central management server adapted to receive administrative instructions pertaining to the transmission of the signals to the subscriber receivers, and in response to the administrative instructions organize signals from a number of signal sources before transmission thereof to the subscriber receivers, at least one client computer each having an interface towards the central management server and being adapted to produce administrative instructions for organizing a sub-set of the signals to be transmitted via the central management server, and a transmission unit adapted to receive the signals and, in accordance with an organization scheme produced by the central management server transmit these signals to the subscriber receivers, the organization scheme

.../...

Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

Continuation of: BOX V

specifies, for each signal to be transmitted, a transmission resource, a time instance and a contents category, wherein the contents category for at least one segment of the signal determines which sub-segment that will be presented in which subscriber receiver.

Accordingly, the invention defined in claims 1-22 is novel and is considered to involve an inventive step.

The invention is industrially applicable.

Claims

1. A system for transmitting signals (S) to a plurality of subscriber receivers (110), wherein each signal (S) represents a type of information belonging to a particular contents category, comprising:
 - a central management server (100) adapted to receive administrative instructions (I_{adm1} , I_{adm2} , I_{adm3}) pertaining to the transmission of the signals (S) to the subscriber receivers (110), and in response to the administrative instructions (I_{adm1} , I_{adm2} , I_{adm3}) organize signals (s_{1a} , s_{1b} , s_{2a} , s_{2b} , s_1 , s_2 , s_3 , s_4 , C) from a number of signal sources (120, 141, 142, 143, 144, 151a-b, 152a-b) before transmission thereof to the subscriber receivers (110),
 - at least one client computer (151, 152, 153) each having an interface towards the central management server (100) and being adapted to produce administrative instructions (I_{adm1} , I_{adm2} , I_{adm3}) for organizing a sub-set of the signals (S) to be transmitted via the central management server (100), and
 - a transmission unit (160) adapted to receive the signals (S, σ_1 , σ_2) and, in accordance with an organization scheme (200) produced by the central management server (100) transmit these signals (S) to the subscriber receivers (110), the organization scheme (200) specifies, for each signal (S) to be transmitted, a transmission resource (TV3, TV4, TV5, CNN, Fill1, Fill2, Fill3, Fill4), a time instance and a contents category, wherein the contents category for at least one segment (s') of the signal (S) determines which sub-segment that will be presented in which subscriber receiver (110).
2. A system according to claim 1, **characterized in that** the transmission unit (160) is adapted to transmit the signals (S) via a central signal distribution system (165, 170).
3. A system according to any one of the claims or 2, **characterized in that** each of the subscriber receivers (110) comprises an interpreting unit having a user specific key representing a profile category of at least one user associated with

- the subscriber receiver, the interpreting unit being adapted to control the reception of a signal (S) such that the key in combination with a piece of contents category information received with respect to a segment (s') of the signal (S) control the subscriber receiver to present a predetermined sub-segment (s'_{1d}) transmitted via a particular transmission resource (TV3, TV4, TV5, CNN, Fill1, Fill2, Fill3, Fill4).
- 5
4. A system according to any one of the preceding claims, **characterized in that** it comprises a return channel (N) from at least one particular subscriber receiver (111) of the subscriber receivers (110) adapted to forward activity-monitoring information (R) pertaining to signals (S) having been presented in the particular subscriber receiver (111) to the central management server (100), and the central management server (100) is adapted to generate a compiled data set representing the activity-monitoring information (R).
- 10
- 15
5. A system according to any one of the preceding claims, **characterized in that** at least one of at least one client computer (151, 152, 153) comprises a means for manually entering activity-monitoring information (R) pertaining to signals (S) having been presented in one or more subscriber receivers (110), and based thereon produce a compiled data set representing the activity-monitoring information (R).
- 20
6. A system according to any one of the claims 4 or 5, **characterized in that** at least one of the at least one client computer (151, 152, 153) is adapted to receive the compiled data set from the central management server (100), and produce the administrative instructions (I_{adm1}, I_{adm2}, I_{adm3}) on basis thereof.
- 25
7. A system according to any one of the preceding claims, **characterized in that** it comprises at least one billing unit (190, 191) adapted to produce billing information pertaining to a respective utilization of the transmission resources (TV3, TV4,
- 30

TV5, CNN, Fill1, Fill2, Fill3, Fill4) administrated by the central management server (100).

5 8. A system according to any one of the preceding claims, **characterized in that** it comprises at least one auxiliary distribution channel (165, 185) adapted to transmit signals (S, σ_1 , σ_2) to the subscriber receivers (110) outside the central management server (100).

10 9. A system according to claim 8, **characterized in that** the at least one auxiliary distribution channel includes at least one distribution resource (185) in addition to the central signal distribution system (165, 170).

15 10. A system according to any one of the preceding claims, **characterized in that** the signals (S, σ_1 , σ_2) represent at least one of text information, acoustic information, image information and video information.

20 11. A system according to any one of the preceding claims, **characterized in that** at least one of the subscriber receivers (110) is represented by at least one of a TV-tuner, a satellite signal decoder, a computer and a broadband mobile communication terminal.

25 12. A client computer (151, 152, 153) adapted to be included in a system according to any one of the claims 1 – 11, **characterized in that** it comprises a graphical user interface (300) adapted to present a time relationship between different signals (S) to be transmitted on at least one channel (TV1, TV2) over which the client computer has a management control.

30 13. A client computer (151, 152, 153) according to claim 12, **characterized in that** the graphical user interface (300) comprises a first graphical means (310) adapted to, for each of the signals (S) to be transmitted on the at least one channel

(TV1, TV2), present the signal's contents category, and a second graphical means (320) adapted to, for at least a sub-set of the signals (S) to be transmitted on the at least one channel (TV1, TV2), enable a user to manipulate segments (s') of each signal (S) such that a particular sub-segment (s'_{1d}) will be presented in each subscriber receiver of the subscriber receivers (110) which has a profile category matching a contents category associated with the particular sub-segment (s'_{1d}).

14. A client computer (151, 152, 153) according to claim 13, **characterized in that** the graphical user interface comprises a third graphical means (330) adapted to, for at least a sub-set of the signals (S) to be transmitted on the at least one channel (TV1, TV2), enable the user to select a suitable sub-segment (s'_{1d}) for each of a number of profile categories for a segment (s') of a signal (S).

15. A client computer (151, 152, 153) according to claim 14, **characterized in that** the third graphical means (330) comprises a selection means adapted to enable the user to, for each sub-segment (s'_{1d}) select a profile category, wherein a default profile category is based on a compiled data set formed on basis of activity-monitoring information (R) pertaining to signals (S) having been presented in the subscriber receivers (110).

16. A client computer (151, 152, 153) according to any one of the claims 14 or 15, **characterized in that** the third graphical means (330) comprises a selection means adapted to allow the user to, for each sub-segment (s'_{1d}) select a geographical area within which subscriber receivers will present the sub-segment (s'_{1d}), wherein a default geographical area is based on positional information pertaining to signals (S) having been presented in the subscriber receivers (110).

17. A client computer (151, 152, 153) according to any one of

the claims 14 - 16, **characterized in that** the third graphical means (330) comprises a selection means adapted to enable the user to, for each sub-segment (s'_{1d}) select a priority level denoting a relative position of the sub-segment (s'_{1d}) within a particular segment (s').

18. A client computer (151, 152, 153) according to any one of the claims 12 - 17, **characterized in that** it comprises a compiler adapted to produce a preliminary organization of the signals (S) on the at least one channel (TV1, TV2) before transmitting corresponding administrative instructions to the central management server (100).

19. A client computer (151, 152, 153) according to claim 18, **characterized in that** the graphical user interface comprises a fourth graphical means adapted to enable a user to manipulate the preliminary organization of the signals (S), and client computer comprises processing means adapted to, based on the user manipulations, produce administrative instructions to the central management server (100).

20. A client computer (151, 152, 153) according to any one of the claims 12 - 19, **characterized in that** the signals (S, σ_1 , σ_2) represent at least one of text information, acoustic information, image information and video information.

21. A computer program directly loadable into the internal memory of a computer, comprising software for controlling the functions of a client computer according to any of the claims 12 - 20 when said program is run on the computer.

22. A computer readable medium, having a program recorded thereon, where the program is to make a computer control the functions of a client computer according to any of the claims 12 - 20.